



Anaconda Legacy Problem

- Anaconda [pit mine and copper processing]: 1952 1978
 Arimetco [heap leach copper recovery]: 1988 2000
- On-site soil, groundwater, and surface water is contaminated (including metals and uranium)
- Groundwater contamination has moved off site
- Most immediate threat to GW is Arimetco (OU8)
 - Capacity/Condition of heap leach pad fluid management system
 - Arimetco is an "orphan" (no private funding available)



Arimetco (OU8)

- Operated heap leach construction and processing: 1989 2000
- Filed for bankruptcy in 1997 and abandoned the site in 2000
- HLPs continue to produce acidic fluids containing metals and uranium
- These fluids drain into the system of ponds known collectively as the Fluid Management System (FMS)
- NDEP responded to the site and took action to stabilize conditions
- Since 2005 EPA has taken a number of removal response actions addressing the fluids



4-Acre "A" Pond - Constructed 2006



U.S. Environmental Protection Agency Region 9 Superfund Division



B and C Pond - Constructed 2013

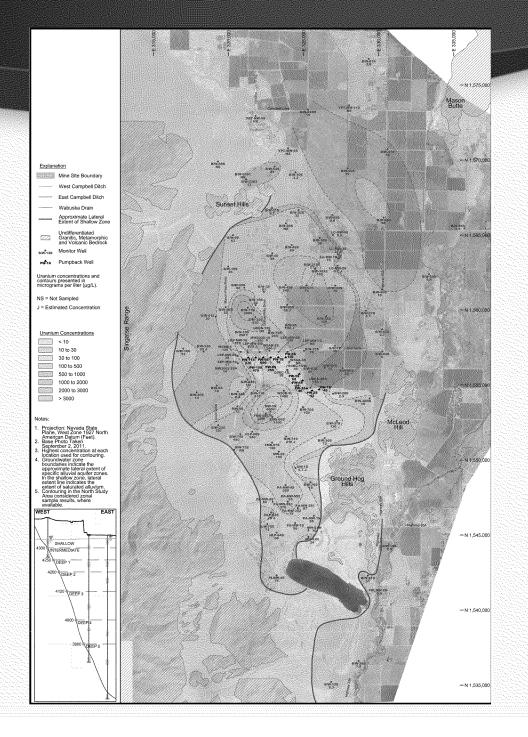


U.S. Environmental Protection Agency Region 9 Superfund Division



Arimetco Response Actions

- \$11M in unreimbursed interim cleanup activities conducted by EPA
 - 2006 EPA constructed 4-Acre "A" Pond
 - 2007 EPA closed Bathtub Pond
 - 2008 EPA closed South SLOT, Mega, Plant Feed, and Raffinate ponds
 - 2010 EPA conducted further repairs to FMS
 - 2012 EPA rebuilt the VLT Pond, funded by ARC and SPS
 - 2013 EPA/NDEP build two new ponds, "B" and "C" ponds, adding 3.2 million gallons of new capacity, adjacent to 4-Acre "A" Pond
- Additional capacity will be needed in 2019
- NDEP and EPA agree on the long term solution to closing and capping Arimetco HLP (approx. cost \$30 to 40 M)





Groundwater Contamination Plume and Monitoring Well Network

Total wells = 354

8



Groundwater Status (OU1)

- EPA Domestic Well Program manages current exposure
 - Atlantic Richfield Company (ARC) conducts domestic well monitoring
 - ARC designing water supply extension (not to all impacted homes)
 - Potential long-term impact to Tribal wells
- Agriculture uses
 - Agricultural wells an important resource
 - GW protection a high priority Statewide
- Remedial Investigation/Feasibility Study underway with EPA and NDEP oversight
- Remedial Approach should ensure contamination source and migration control, and ultimate restoration of aquifer



Private Company Stakeholders

- Atlantic Richfield Company acquired the Anaconda Copper Company in 1977
- ARC responsible for majority of site investigation and cleanup
- ARC under EPA enforcement orders responsible for groundwater but not currently paying EPA oversight bills
- Singatse Peak Services acquired Arimetco holdings in 2011
- FMS copper recovery pilot project results in 2014 not economic
- SPS agreements with Freeport Nevada
- Possible future mining activity in 10 to 20 years

[Note: BLM owns a large portion of the mine site property]



Arimetco Solutions

- Re-mining prospects limited due to timing and market economics
- NDEP efforts to secure private funding unsuccessful to date
 - ARC and SPS declined to participate in NDEP proposals for addressing OU8
- If federal funding is required for remedial action, the site must be listed on the NPL



National Priorities List (NPL)

- Dec 22 letter to Governor seeking state's position
- Timing Constraints to Listing
 - Summer 2019 Remedy construction must begin
 - 2017 to 2018 secure funding and complete design
 - March 2017 NPL final
 - March 2016 proposal to NPL
- NDEP may continue to explore private funding
- Once proposed, State may request deferral of final listing



Anaconda Summary

- Anaconda (Arimetco) is a legacy problem but there are no funds to address it
- EPA is working collaboratively with NDEP
- EPA/NDEP preference is that the responsible parties pay to clean up the site (e.g. Rio Tinto)
- State first choice is other (private) funding sources but NPL listing is a necessary fallback option



Questions and Discussion

U.S. Environmental Protection Agency Region 9 Superfund Division